

ABSTRACT OF THE DISCLOSURE

A proxy apparatus and method for streaming media information via at least one network and for building-up a good quality version of the media information. When a user device communicates with the proxy apparatus using a particular bandwidth and requests that media information be provided from a media server, the proxy apparatus first determines if a version of the media information encoded for the user device's connection bandwidth has been stored in the proxy apparatus. If a version of the media information encoded for the user device's bandwidth is not available from the proxy apparatus, the proxy apparatus sends a request to a media server for the media information. Once the media server receives the request, the media server begins to stream a copy of the media information encoded for the user device's bandwidth to the user device via the network and proxy device. If a version of the media information for the bandwidth is not available from the media server, the version for the largest bandwidth that does not exceed the bandwidth of the user device connection, is streamed to the user device. If the version of the media information has missing packets, the proxy device sends retransmission requests to the media server to obtain the missing packets, thereby building-up a good quality version of the media information.